

DESCRIPTIONS OF NEW HYMENOPTERA.

BY H. L. VIERECK.

Superfamily ICHNEUMONOIDEA.

Family BRACONIDÆ.

Proteropoides, new genus.

Near *Proterops*. First abscissa of radius as long as the second, which latter is a trifle longer than the second transverse cubitus, radius of hind wings not broken, uniformly thickened throughout and nearly attaining apex of wing, maxillary palpi 4-jointed, anterior margin of anterior ocellus distinctly above an imaginary line drawn tangent to uppermost edge of eyes, posterior ocelli nearer to each other than to the nearest eye margin, but a little farther from each other than from the anterior ocellus.

Type—*Proteropoides hertzogi*, new species.

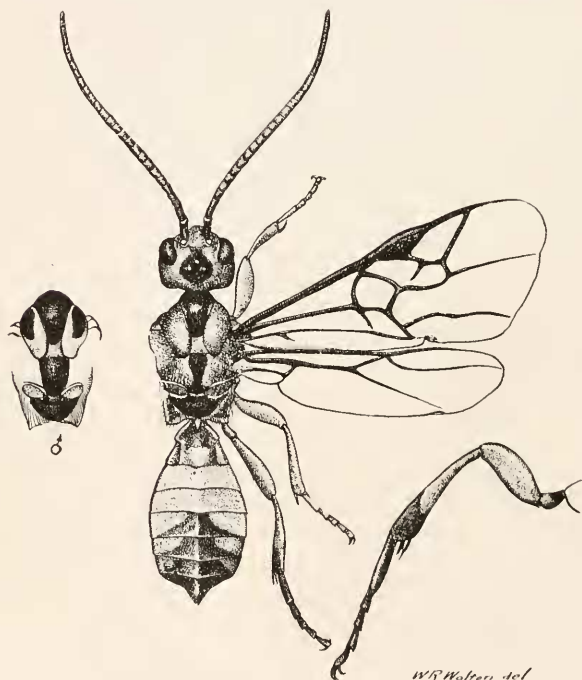


FIG. 1.—*Proteropoides hertzogi* Viereck.

Female 4 mm. long; tegument shining, seemingly sculptureless; antennæ more than 22-jointed, first joint of flagel about as long as the

two following combined, head orange color, with a black stain between insertion of antennæ and occiput, eyes black, mandibles with dark tips antennæ brown to fuscous, the brown joints tipped with fuscous; thorax mostly orange, the middle lobe of mesonotum, mesopleura with the former entirely and the latter mostly black, scutel, postscutel and metathorax partly blackish, wings fuscous, stigma and veins blackish, legs almost entirely orange yellowish and apical tarsal joint of front legs, apical half of middle tarsi, base of hind coxæ and trochanters, apex of hind tibiæ, hind tarsi beyond basal half of first tarsal joint, more or less fuscous; abdomen with the first dorsal segment joint of front legs, apical half of middle tarsi, base of hind coxæ and trichanters, apex of hind tibiæ, hind tarsi beyond basal half of first tarsal joint, more or less fuscous; abdomen with the first dorsal segment blocked off into three parts by an impressed line or groove on each side of the middle half along the posterior margin, these pieces becoming narrowed anteriorly, the laterals attaining a triangular shape, central lobe of first dorsal segment partly blackish, apical one-half of dorsum of abdomen with a blackish median longitudinal stain, rest of abdomen orange color, exerted portion of ovipositor scarcely as long as the first joint of hindmost tarsi.

Male somewhat shorter than female; nearly all of dorsum of thorax black.

Type female and male, collection State of Pennsylvania, Capitol, Harrisburg, Pa.

Type locality, Harrisburg, Pa.

Harrisburg, Pa., July 27, August 2 (D. K. McMillan); June 14, 1908 (P. H. Hertzog).

Chelonus carpocapsæ, new species.

This species is very like *C. fissus*, from which species as well as all other species of *Chelonus* it can readily be separated by the structure of the metathorax, which along the outer and upper edge of the posterior face is produced into four nearly equidistant prolongations that are nipple-shaped in outline, the productions nearest the middle line are farther from each other than from the outermost productions. This structure of the metathorax calls to mind the structure of the apical margin of the abdomen in *Chrysis (Tetrachrysis) nitidula*, though the productions are by no means thinned out or pointed in this case as in the foregoing species: scape and basal third of flagel brownish, basal half of posterior tibiæ mostly brownish, the apical half almost black.

Type—No. 12258, U. S. National Museum, Washington D. C.

Type locality, Douglas, Mich. Seven specimens, August 3 to 6, 1908. On authority of Mr. Braucher, working under the direction of Mr. Quaintance, the host of this species is the codling moth or *Carpocapsa pomonella*.

Superfamily SPHECOIDEA.

Family CRABRONIDÆ.

Crabro (Hoplocrabro) spinibuccus, new species.

Cheek approximately as in accompanying drawing (fig. 2, a), female 7 mm. Dullish, sericeous, and finely punctured; enclosure of metathorax covered with fine radiating striæ becoming coarse at base and apex, on each side of the median groove of the metonotum the latter region is nearly sculptureless. Pygidial area flat, sparsely coarsely punctured.

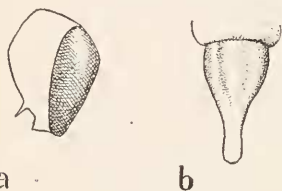


FIG. 2.

less brown; wings brownish transparent, nervures and stigma dark brown, tegulæ testaceous.

Mostly black in color; clypeus mostly, scape entirely, tubercles, pronotum, post-scutellum, and more or less of the outer side of tibiæ and the coxæ and trochanters yellow, rest of antennæ and legs, the mandibles, and abdomen more or

Type in collection of the American Entomological Society, Philadelphia, Pa.

Type locality, Havilah, Cal.

Crabro (Cuphopterus) foveolineatus, new species.

Differs from the known species of this subgenus in having the foveæ of the front narrow or linear.

Females 9 mm., finely sculptured all over and in most places subtle, satiny, with exceedingly fine striæ that are close together and interspersed with minute but distinct punctures that are very sparse; frontal foveæ more than 5 times as long as wide, practically parallel-sided and extending along the upper one-third of the inner eye margin; metathorax with a deep impression posteriorly, the enclosure longitudinally finely closely striate, subtle, satiny, the rest of the metathorax sculptured much the same, the striæ transverse to oblique; pygidium funnel-shape in outline (fig. 2, b), with the narrow portion alone margined, the remainder rounded, seemingly impunctate throughout, the broad portion longitudinally concave; black, scape, pedicel, anterior and middle legs, pronotum, scutel, postscutel, the posterior trochanters, and the upper division of the mesopleura entirely yellow; clypeus, mandibles, posterior tibiæ and abdomen mostly yellow, partly brown; flagel, tips

of mandibles, posterior coxæ, femora and tarsi, and apical abdominal segment entirely brown; cheeks with a yellow mark adjoining mandibles, wings brownish transparent; veins and stigma dark brown.

Type in American Entomological Society, Philadelphia, Pa.
Type locality—Shasta County, Cal.

Superfamily VESPOIDEA.

Family TIPHIIDÆ.

Paratiphia algonquina, new species. The Algonquin Paratiphia.

This is apparently the only species of *Paratiphia* in the eastern part of the United States. According to present knowledge it seems to be confined to the State of New Jersey. This form has been erroneously determined as *P. albilabris* Spinola, which latter has hyaline wings and hails from California. From *P. clypeata* Smith, formerly *Tiphia*, *P. varipunctata* Cameron, *P. fuscipennis* Cam., *P. robusta* Cam. and *P. fuscinerva* Cam., this species is readily separated by the nonconcolorous wings. From *P. duodecimmaculata* Cam. by the immaculate abdomen.

Male 8 mm. long. Nearly all of the tegument shining black, punctate, with the punctures ranging from adjoining to at least as far as three puncture-widths apart, bedecked with silvery pubescence that nowhere is so thick as to obscure the tegument and is made up of hairs the longest of which are shorter than the 13th joint of the antennæ, the hairs also much thinner than the thinnest vein in the wings.

Head a little wider than long; eyes diverging above; converging below; malar space practically wanting; if straight lines were drawn connecting the centers of the ocelli an obtuse-angled triangle would be formed, shortest distance between the posterior ocelli apparently equal to the shortest distance between the lateral ocellus and the nearest eye margin; clypeus about twice as wide as long, yellow, with rather distinct punctures from one to several puncture-widths apart, its anterior margin seemingly depressed somewhat arcuately, convexly rounded; mandibles falcate, rounded-off at tips, with a rounded angle or vestigial tooth on the inner margin near the apex, mostly yellow above, brownish at apex; antennæ nearly of the same diameter throughout, the pedicel distinctly narrower than the scape or the first joint of the flagel, scape rather oviform, equal in length to the length of the pedicel and the first and second joints of the flagel combined, first and second joints of flagel subequal in length, wider than long, the succeeding joints longer than wide but only slightly so or not much longer than wide, with the exception of the apical joint, which is easily twice longer than wide. Metathorax with a superior and posterior aspect in addition to its sides,

the posterior aspect rugosopunctate or nearly and separated from the superior aspect by a convex ridge which is not sharp and with a low rather angular prominence on each lateral edge in the middle, the superior aspect rather irregularly coarsely sculptured with a rather distinct median, longitudinal, rounded off, low carina, sides of metathorax with transverse striae, each stria being nearly as coarse as the longitudinal carina on the superior aspect; wings hyaline, excepting the stigma and veins, which are dark brown, and a stain occupying the greater portion of the apical half of the wing, which is brown, hirsute, with shorter hairs than on the body; the hairs are also of a different kind and dark.

Abdomen with a distinct anterior aspect to the first dorsal segment, separated from the dorsal aspect by a transverse, curved carina; segments along the apical margin with a fringe made up of apparently single and rather appressed hairs; pygidium bounded on each side and apically by a rather distinct carina.

Type, female and male—No. 12252 U. S. National Museum, Washington, D. C.

Type locality, Lakehurst, N. J.

The type female and male and three paratopotypes were submitted to the writer for determination by Prof. John B. Smith. Another specimen, a paratype, was collected by Mr. V. A. E. Daecke at Brown's Mills Junction July 21, 1907.

Female 6.5 mm. Differs from the description of the male as follows:

Longest hairs seemingly shorter than the twelfth joint of the antennae.

Head, shortest distance between posterior ocelli somewhat shorter than the distance between lateral ocellus and nearest eye margin, **clypeus** black; mandibles with hardly a rounded angle on the inner edge, castaneous throughout, pedicel as wide and about as long as the first joint of the flagel scape easily twice as long as its greatest width or about equal to the combined length of the pedicel and first and second joints of the flagel, most of the joints of the flagel subequal and wider than long.

Superior aspect of metathorax with a triangular enclosure formed by two oblique lateral lines, the enclosure bisected by a longitudinal raised line; wings with the apical fourth and greater part of the third fourth brownish, the brownish portion streaked with faint hyaline lines.

At least the apical half of pygidium with adjoining punctures, excepting the pygidium the apical dorsal segment of the abdomen is rugose or reticulate rugose.

Female paratype from Lahaway, N. J., August 1, 8 mm. long, with the second transverse cubitus wanting in the left wing and represented in the right wing by an abscissa nearly one-third as long as the hypothetical second transverse cubitus.

The specimens from the type locality were collected on July 7, and paratype Ocean County, N. J. (J. B. Smith); paratypes from Clementon, N. J., June 25, 1899 (collected by the writer and in the collections of the New Jersey Agricultural Experiment Station and the Academy of Natural Sciences, Philadelphia, and June 24, 1906 (H. S. Harbeck) show variation in size and in the sculpture of the metanotum, there being on the latter longitudinal and lateral carinae in addition to the median longitudinal carinae, which are about as stout as the last mentioned carinae.

Two of the paratopotypes are somewhat smaller than the type; the paratype from Brown's Mills Junction has the carina of metanotum and the metapleural carinae poorly defined.

Superfamily APOIDEA.

BRACHYCEPHALAPIS, new subgenus.

Type—*B. californica* new species.

Differs from *Melitta americana* Sm. in that the head is wider than long, whereas in the above species it is as wide as long. The relation of the posterior angle of the mandible is as in *Melitta americana* Sm. or the same as in Robertson's *Anthophoroidea*, but in other major characteristics it is as in the same author's *Andrenoidea*.

Melitta (*Brachycephalapis*) *californica*, new species.

Female 14 mm. Third abscissa of the radius about two-thirds as long as the second transverse cubitus, the first abscissa of the radius as long as or a little longer than the radial side of the stigma, the transverse median vein practically interstitial with the basal vein, the second abscissa of the radius a little longer than the third abscissa of the radius. Black pubescence or hairs on the vertex and along the inner eye margin, pale yellowish hairs on the inner side of the posterior metatarsi, the dark hairs of the anal fimbria brown, otherwise essentially as in *M. americana* Sm.

Type—California Academy of Sciences, San Francisco, Cal.

Type locality, Santa Margarita Island, Lower California.

One paratype, No. 12256 U. S. National Museum, with almost exactly the same characteristics as the type, from Magdalena Bay, Lower California. Both taken in March.

COQUILLETAPIS, new genus.

Type—*C. melittoides* new species.

Related to *Entechmia*, from which it differs in the relation of the posterior angle of the mandibles to the eye, which is

essentially as in Robertson's *Andrenoidea* in the structure of the anterior femora and in the *Andrena* habitus.

Coquillettapis melittoides, new species.

Female 12 mm. long.

Head with the occipito-clypeal distance greater than the ocular distance, first joint of flagel on its upper side seemingly slightly longer than the next two joints combined on their upper sides. The second and following joints of the flagel excepting the apical joint subequal and wider than long, the apical joint approximately one and one-half times as long as wide at base, ocelli forming a slightly arcuate row, the posterior ones about as far from each other as from the nearest eye margin, cheeks rounded off and at their widest part slightly wider than the eye as seen from the side, malar space practically wanting, mandibles simple, except for a slight indication of a tooth on the inner margin near the apex, tegument of the head mostly smooth, polished and impunctate, a few scattered punctures on the cheeks and along the eye margins on the front; clypeus and labrum appear to be uniformly uneven and shiny; thorax above shining, and sparsely punctured, anterior femora at base beneath produced into a hairy falcate process which is directed downward backward and inward; this process from base to apex is approximately half as long as the femur, scopa of posterior tibiae and metatarsi plumose on account of hairs that are branched and most of which are longer than the greatest width of the joint to which they are attached; abdomen shining above and beneath, indistinctly sculptured, being sparsely punctured and somewhat roughened above, more closely punctured beneath.

Tegument almost entirely black except where relieved by some brownish, as in the mouth parts, tegulae and tarsi; pubescence black except on vertex, dorsum of thorax and first dorsal abdominal segment, where it is ochreous.

Type—No. 12253, U. S. National Museum, Washington, D. C.

Type locality, Los Angeles County, Cal. One specimen collected by Mr. D. W. Coquillett.

PANURGOMIA, new genus.

On account of its two submarginal cells, etc., this might be relegated to a relationship with *Rhophitoides* Schenck. It is however more likely, judging from its habitus, that this genus is nearer *Nomia* and really an Andrenid with only two submarginal cells, the first nearly one and a half times as long as the second on the cubital vein. In the relationship between the posterior angle of the mandible to the posterior eye margin

and in the glossa it is the same as Robertson's *Anthophoroidea*, in other characters like that of his *Andrenoidea*.

Panurgomia fuchsi, new species.

Female 10 mm. long.

Head with the ocular distance slightly greater than the occipito-clypeal distance, cheeks rounded, somewhat trapezoidal in outline, as viewed from the side, malar space practically wanting, ocelli forming a slightly arcuate row, the lateral ocelli seemingly a little nearer to each other than to the nearest eye margin; the third joint of the antennæ somewhat shorter than the next two joints combined; beyond the first joint of the flagel, the joints are subequal in length, ranging from slightly wider than long to slightly longer than wide, except the apical joint, which is about one and one-half times as long as the joint preceding the same; mandibles simple, except for a rounded tooth on the inner margin about halfway between the middle and the apex of the mandible; clypeus smooth and shining, with a few scattered punctures; labrum round and shining, front and cheeks mostly shining and sparsely punctured. Thorax with the dorsum shining and covered with short felt-like hair, excepting the postscutel, which is dull and provided with long hairs, and the metanotum, which is mostly dull and bare, being finely granular; posterior tibia and third metatarsus provided with a scopa composed of stiff, simple hairs, most of which are distinctly longer than the widest part of the posterior tibia. Abdomen very closely punctured, or rather indistinctly so, and shining, the dorsal segments indistinctly suppressed, the second dorsal segment being depressed one-fourth the distance from the apex, or less than one-fourth; pygidium dull, indistinctly sculptured and spatulate in outline. Tegument mostly black, greater part of flagel brown, most of the mandibles and mouth parts castaneous; tegulæ, costa, and stigma testaceous, rest of the veins translucent brownish; tarsi, and stigma testaceous, rest of the veins translucent brownish; tarsi more or less dark brown, the apex of the first, second, and third dorsal-abdominal segments yellowish, preceded by a black band which in turn is preceded by a reddish-brown band; the depressed portion of the fourth dorsal segment and the apical half of the fifth dorsal segment more or less pale. Pubescence ochreous, sort of brownish on the dorsulum.

Type locality, Prescott, Ariz.

One specimen, collected by Mr. Fuchs.

DOLICHOCHILE, new genus.

Type—*Dolichochile melittoides* new species.

Female 10 mm. long, head somewhat wider than long, that is, with the ocular distance greater than the occipito-clypeal distance. Superficially exactly like *Melitta americana* in color and sculpture, except that the

disc of the dorsulum and scutellum are less punctured and more polished and that the abdomen above is polished and less punctured as well as less distinctly punctured. First joint of flagel distinctly longer than either the second or third joints, but shorter than these two combined and just about as long as the fourth. The fourth and following joints almost equal in length, excepting the apical joint, the longest side of which is distinctly though not much longer than the corresponding side of the joint preceding it. The apical joint is obliquely truncate at tip. The truncature smooth and polished; mandibles so long that the tip of a completely flexed mandible would extend almost to an imaginary vertical line drawn tangent to the outermost edge of the eye; the inner margin provided with a rounded tooth near the middle, beyond which there is an emargination and then an arcuate edge to the tip; labrum polished and rounded; malar space present and distinct, rather quadrate, and as long from eye to mandible as is the first joint of the flagel; ocelli in an arcuate row, the lateral ones a little nearer to each other than to the nearest eye margin; first recurrent vein received by the second submarginal cell a little before the middle. Otherwise virtually as in *Melitta americana*.

Type—No. 12254 in the U. S. National Museum, Washington, D. C.

Type locality, Clementon, N. J. One specimen collected June 24, 1906, by G. M. Greene.

***Melitta americaniformis*, new species.**

In size and sculpture like the species described above. In color and structure like *Melitta americana*.

Type—No. 12255, U. S. National Museum, Washington, D. C.

Type locality, Jamesburg, N. J. One female specimen collected July 4 in a cranberry bog by Professor John B. Smith.

BIRKMANIA, new genus.

Related to *Macrotera*, from which it differs in the first joint of the labial palpus, being just about as long as the three following joints united and in the claws being toothed near middle, not cleft.

Type—*Birkmania andreoides* new species.

***Birkmania andreoides*, new species.**

Female 8 mm.

Ocular distance about one and one-half times as great as the occipitoclypeal distance; cheeks rounded and about as wide as the eyes as seen from the side; malar space wanting; mandibles simple, the inner edge undulate; clypeus transverse, nearly twice as wide as long, shining somewhat more than the rest of the head and provided with distinct punctures that are from two to five or more puncture widths apart; the supra-clypeal area punctured like the clypeus; rest of the head punctured,

but not so distinctly nor so sparsely as the clypeus; frontal fovea in the form of a cuneate impression nearly as long as the scape and parallel to the margin of the eye, from which it is separated by a space as wide as the fovea itself; first joint of flagel nearly as long as the next two joints combined; the fourth to the eleventh joints of the antennæ subequal in length; the apical joint about as long as the two preceding; thorax shining and punctured, excepting the metathorax, which has a triangular rugulose area on the metanotum and is otherwise finely shagreened; hairs of tibial scopa simple, sparse, and about as long as the tibia is wide on its flat side; transverse-median vein and basal vein interstitial, as are the first transverse cubitus and the first recurrent veins; abdomen shining with a fine ripple-like sculpture and with punctures not so distinct as on the clypeus, but just about as sparse; the apical margin of the dorsal segments obscurely testaceous, the second dorsal segment depressed about one-third the distance from the apex to the base; tegument mostly black, the mandibles partly castaneous, the flagel translucent brown beneath; tarsi and claws more or less dark brown; pubescence ochreous, excepting on the face cheeks and pleura, where it is rather whitish.

Type—No. 12257, U. S. National Museum, Washington, D. C.

Type locality, Fedor, Lee County, Tex. One specimen collected by the Rev. Birkman, April 9.

NEW CHALCIDOIDEA.

[Hymenoptera.]

BY J. C. CRAWFORD.

Leucospis robertsoni, new species.

Female: Length 9 mm., ovipositor reaching beyond apex of first abdominal segment; head and abdomen metallic, thorax black, with metallic tints; pubescence yellowish; the following parts reddish: scape and basal joints of antennæ, prothorax except a black spot on each side, postscutellum and metathorax, metapleuræ, mesopleuræ behind, first abdominal segment and base of second, front and middle legs except coxæ, hind tibiæ and tarsi, margins of hind femora and apices of hind coxæ; a narrow line on rear of prothorax and narrow lines on sides and rear of mesonotum more yellowish; face below antennæ brownish, finely irregularly vertically rugose, with scattered large punctures on sides of face; above antennæ strongly metallic, rugoso-punctate; first joint of flagellum shorter than pedicel, the second about twice as long as the first; cheeks from eyes to base of mandibles longer than second joint of flagellum; eyes slightly emarginate within; prothorax without any sign of a transverse keel; mesothorax strongly coarsely rugoso-punctate; postscutellum with a semicircular raised area strongly margined, the margin reflexed and projecting;